AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-91. (Canceled).

Claims 92-131. (Canceled).

132. (Withdrawn and Currently Amended) Apparatus for the treatment of obstructive sleep apnea, comprising:

a continuous positive airway pressure device; and

a flexible tube; and

a humidifier including:

a humidifier base,

a humidifier lid movable between closed and open positions while connected to the humidifier base,

a humidifier tank having a tank lid including an outlet, said humidifier lid being adapted to seal around the outlet of the tank lid when the humidifier lid is in the closed position, and

a humidifier heater plate;

the continuous positive airway pressure device and the humidifier are releasably connected by a latch;

the humidifier lid includes an air delivery portion adapted to mate with the flexible an air delivery tube;

the humidifier lid and the humidifier base are connected by a hinge adapted to allow the humidifier lid to rotate between [[a]]the closed position and an open position;

the humidifier lid and the humidifier base include a locking mechanism adapted to releasably hold the humidifier lid in [[a]]the closed position;

the humidifier base is adapted to receive the humidifier tank when the humidifier lid is in an open position and to locate the humidifier tank in heat transfer communication with the humidifier heater plate, and to defineestablish a sealed gas flow path between the continuous positive airway pressure device, the humidifier tank and the flexible tubeair delivery portion of the humidifier lid when the humidifier lid is in [[a]]the closed position.

133. (Canceled)

134. (Withdrawn and Currently Amended) The apparatus of claim 132 wherein the humidifier base <u>defines includes</u> a first gas flow path between the continuous positive airway pressure device and an interior of the humidifier tank, and a second gas flow path <u>between extending from</u> the interior of the humidifier tank and <u>through</u> the <u>flexible tubehumidifier lid</u>.

135. (Withdrawn and Currently Amended) A humidifier comprising:

<u>a humidifier base including</u> a latch adapted to releasably engage the humidifier with a continuous positive airway pressure device;

an air inlet adapted for sealable connection to an outlet of the continuous positive airway pressure device and being further adapted to receive a supply of air at positive pressure from said continuous positive airway pressure device through said inlet;

a heater plate;

a water tank adapted to receive the supply of air at positive pressure and adapted to be in heat transfer communication with the heater plate, said water tank having a water tank lid with an outlet;

a humidifier <u>lid connected to the humidifier base to move between open and closed</u>

<u>positions, the humidifier lid having an</u> air outlet adapted to mate with <u>a flexible</u> <u>an air delivery</u>

tube to deliver the supply of air at positive pressure to a mask, <u>said humidifier lid being adapted</u>

<u>to be in sealing contact with a surface surrounding the outlet of the water tank lid when the</u>

humidifier lid is in the closed position; and

wherein said humidifier is constructed and arranged to removably locate the water tank without disconnection of said flexible the air delivery tube.

- 136. (Currently Amended) Humidifier A humidifier-comprising
- a water [[tub]]tank having a water [[tub]]tank lid with an outlet,
- a humidifier base having a water [[tub]]tank receiving portion; and
- a humidifier lid having an outlet adapted to mate with an air delivery conduit_tube, the humidifier lid being connected to the humidifier base such that the humidifier lid is movable between a closed position and an open position while connected to the humidifier base;

wherein the humidifier lid is adapted to be in pressurized sealing relationship with seal against a surface surrounding the outlet of the water [[tub]]tank lid to allow a flow of air such

that the humidifier includes a sealed air flow path extending from the water [[tub]]tank and through the outlet of the humidifier lidto the air delivery conduit when the humidifier lid is in [[a]]the closed position.

- 137. (Previously Presented) The humidifier of claim 136 wherein the humidifier lid is a hinged lid.
- 138. (Currently Amended) The humidifier of claim 136 wherein the lid is connected to the humidifier base by hinges further comprising hinges to connect the humidifier lid to the humidifier base.
- 139. (Withdrawn and Currently Amended) A breathable gas supply apparatus for treatment of respiratory disorders comprising:
- a continuous positive airway pressure device adapted for releasable connection to a humidifier; and
 - a humidifier comprising:
- a humidifier base having an aperture adapted to receive a supply of breathable gas from the continuous positive airway pressure device;
 - a first seal extending about the aperture;
- a water [[tub]]tank having an air inlet and an air outlet, and respective flat surfaces surrounding the air inlet and air outlet, the surface surrounding the inlet being flat, the water tank having a water tank lid including an outlet;

a humidifier lid with an air delivery portion adapted to mate with an air delivery conduit tube so that the supply of breathable gas can be provided to a patient interface;

the humidifier lid being adapted to seal around the outlet of the water tank lid when the humidifier lid is in a closed position, via a second seal located on an underside of the humidifier lid;

wherein the first seal is adapted to be in sealing relationship with the flat surface surrounding the air inlet of the water [[tub]]tank when the water [[tub]]tank abuts the first seal; and

the second seal is adapted to be in sealing relationship with the [[flat]]surface surrounding the air outlet of the water [[tub]]tank when the humidifier lid is ain the closed position.

140. (Withdrawn and Currently Amended) A respiratory treatment device comprising a flow generator and a humidifier adapted to receive a supply of air at positive pressure from the flow generator and deliver it to an air delivery conduit tube;

the humidifier includes a base, a humidifier lid <u>having an outlet and being movable</u>

<u>between closed and open positions while connected to the base,</u> and a water tank, and the water tank includes a water tank lid <u>including an outlet</u>;

the water [[tub]]tank is removably and sealably receivable in the base to define-form an air flow path for air received from the flow generator to an interior of the water tank;

the humidifier lid is connectable to the air delivery conduitube, and is adaptable to form a seal includes a seal to sealingly contact [[with]] around the outlet of the water tank lid to define

ansuch that the humidifier includes a sealed air flow path extending from the interior of the water tank to the air delivery conduit and through the outlet of the humidifier lid.

- 141. (Withdrawn and Currently Amended) The respiratory treatment device of claim 140 constructed and arranged to allow removal of the water tank without detaching the air delivery conduit tube from the humidifier lid.
- 142. (Withdrawn and currently amended) The device of claim 140 wherein the water tank further comprises a rear first aperture constructed and arranged to align with an opening in the <u>base of the</u> humidifier when the water tank is located in the base to receive the supply of air at positive pressure from the flow generator therethrough.
- 143. (Withdrawn and Currently Amended) The device of claim 142 wherein the water tank includes a first flat surface surrounding the rear opening.
- 144. (Withdrawn and Currently Amended) The device of claim 143 wherein the humidifier base includes a seal adapted to abut the first-flat surface of the water tank in a locus surrounding the rear opening to create a sealed air path from the flow generator to the water tank.
- 145. (Withdrawn and Currently Amended) The device of claim 140 wherein the humidifier lid is constructed and arranged to seal against the water tank lid to form an air path between the interior of the tank and the air delivery conduit tube when the humidifier lid is in [[a]]the closed position.

146. (Canceled)

- 147. (Withdrawn and Currently Amended) The device of claim [[146]]140 wherein the seal comprises a removably attachable gasket.
- 148. (Withdrawn) The device of claim 147 wherein the seal comprises a curved sealing flange.
- 149. (Withdrawn and Currently Amended) The device of claim 140144 wherein the outlet of the water tank lid comprises an air outlet second-includes an aperture and a second-flat surface adjacent or surrounding said an air outlet aperture.
- 150. (Withdrawn and Currently Amended) The device of claim 148149 wherein the curved sealing flange is adapted to seal against the second flat surface of the water tank lid when the humidifier lid is in [[a]]the closed position.
- 151. (Withdrawn and Currently Amended) The device of claim 140 wherein the humidifier <u>lid</u> comprises an outlet pipe arranged at an acute angle to the <u>humidifier</u> lid.
- 152. (Withdrawn) The device of claim 140 wherein the humidifier lid is pivotally mounted to the base.

- 153. (Withdrawn and Currently Amended) The device of claim 152 wherein the <a href="https://humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov/humidifier.ncm.nih.gov
- 154. (Withdrawn and Currently Amended) The device of claim 140 wherein the water tank lid is structured to define includes an arcuate air flow path for air received from the flow generator.
- 155. (Withdrawn) The device of claim 154 wherein the arcuate air flow path is Ushaped.
- 156. (Withdrawn) The device of claim 140 wherein the humidifier lid further comprises a locking mechanism.
- 157. (Withdrawn) The device of claim 156 wherein the locking mechanism is configured to retain the humidifier lid in sealing relationship with the water tank lid when the locking mechanism is engaged.
- 158. (Withdrawn and Currently Amended) The device of claim [[140]]157 wherein the humidifier is removably attachable to the flow generator.

- 159. (Withdrawn) The device of claim 158 further comprising a latch to retain the humidifier to the flow generator.
- 160. (Withdrawn and Currently Amended) The device of claim 145, wherein the water tank and the base include surfaces that are engagable with one another adapted to press the water tank and the water tank lid rearwards relative to the base when the humidifier lid is closed.
- between a continuous positive airway pressure device and a flexible an air delivery tube for delivery of a supply of humidified breathable gas to a patient for treatment of obstructive sleep apnea, and to define establish an air flow path between the continuous positive airway pressure device and the flexible air delivery tube, the humidifier having a water tank and the humidifier being constructed and arranged to allow removal of the water tank for refilling with water without disconnection of the flexible air delivery tube, the water tank having a water tank lid including an outlet, wherein the water tank is configured to be in sealing relationship with the air flow path when an inlet to the water tank abuts a first seal of the humidifier and a lid of the humidifier is pressed against an sealingly contacts a surface surrounding the outlet of the water tank.
- 162. (Withdrawn) The humidifier of claim 161 wherein the lid of the humidifier further comprises a second seal located on an underside of the lid.

- 163. (Withdrawn and Currently Amended) The humidifier of claim 161162 wherein the lid of the humidifier is structured to rotate about a hinge between an open position and a closed position.
- 164. (Withdrawn and Currently Amended) The humidifier of claim 162163 wherein the water tank is configured to be in sealing relationship with the second seal when the lid of the humidifier is in athe closed position.

165. (Canceled)

166. (Withdrawn and Currently Amended) A method of sealably locating a humidifier water [[tub]]tank in a humidifier base comprising:

positioning a rear surface of the humidifier water [[tub]]tank to abut a humidifier seal supported by the humidifier base to form a sealed air path from a flow generator outlet into an interior of the water [[tub]]tank; and

pressing a lid of the humidifier onto a top surface a lid of the water tank to sealingly contact a surface surrounding an outlet aperture of the water tank lid of the humidifier water tub to form a sealed air path between an interior of the humidifier water [[tub]]tank and an air delivery conduit tube.

167. (Withdrawn) The method of claim 166 further comprising rotating the lid of the humidifier from an open position to a closed position.

- 168. (Withdrawn) The method of claim 167 further comprising rotating the lid of the humidifier about a hinged connection.
- 169. (Withdrawn) The method of claim 166 further comprising closing the lid of the humidifier using a pivoting movement.
- 170. (Withdrawn) The method of claim 166 further comprising engaging a humidifier lid locking mechanism.
- 171. (Withdrawn and Currently Amended) The method of claim 166 whereby the positioning the rear surface of the humidifier water tub to abut a humidifier seal comprises positioning the humidifier water [[tub]]tank so that [[the]]a humidifier seal abuts a rear opening of the humidifier water [[tub]]tank in a locus surrounding the rear opening of the humidifier water [[tub]]tank.
- 172. (Withdrawn and Currently Amended) The method of claim 166 further comprising pressing or moving the humidifier water [[tub]]tank rearwards.
- 173. (Withdrawn and Currently Amended) In a humidifier having a tank and a humidifier lid, a method of filling the tank with water comprising:

leaving an air delivery tube connected to the humidifier lid; releasing a locking mechanism of the humidifier lid;

rotating the humidifier lid from a closed position to an open position to release a sealed connection between the humidifier lid and an outlet of a lid of the tank;

subsequent to rotating the humidifier lid, removing the tank from a humidifier base; and removing a lid of the tank; and

filling the tank with water.

- 174. (Withdrawn and Currently Amended) A humidifier for delivering humidified breathable gas to a patient, including:
 - a humidifier case having a hinged humidifier lid,
- a water <u>container-tank</u> adapted <u>for drop-in assembly to be positioned at least partly in said case, the water tank having a tank lid,</u>
 - a heater in heat transfer communication with said water eontainertank,
- a gas flow path including a gas inlet, a humidified gas outlet and an intermediate gas flow path which contacts to contact the gas with water vapour from said container water tank,

wherein said water <u>container tank</u> has a gas passage inlet <u>and a gas passage outlet</u> communicating with said gas flow path, <u>said gas passage outlet being formed in the tank lid</u>,

said humidifier further including a gas passage inlet seal [[for]]to form a first sealing connection between said gas passage inlet [[to]]and said gas flow path, and a gas passage outlet seal to form a second sealing connection between the gas passage outlet and said gas flow path,

wherein said <u>first and second</u> sealing connection is actuated connections are established by <u>drop-in assembly of inserting</u> said water <u>container-tank</u> at least partly within the <u>base</u> and hinged closing of said <u>humidifier lid to sealingly contact a surface surrounding the gas passage</u> outlet of the tank lid.

- 175. (Withdrawn and Currently Amended) A humidifier according to claim 174, wherein said gas passage inlet is located on a rear face of said water <u>container tank</u> and aligns with a gas passage aperture on an opposed face of said case.
- 176. (Withdrawn and Currently Amended) A humidifier according to claim 175, wherein closing of said <a href="https://humidifier.lid.google.com/humidifier.lid.google.com/humidifier.lid.google.com/humidifier.lid.google.com/humidifier.lid.google.com/humidifier.lid.google.com/humidifier.lid.google.com/humidifier.lid.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humidifier.google.com/humid
- 177. (Withdrawn and Currently Amended) A humidifier according to claim 176, wherein said gas passage inlet seal is attached to said gas passage aperture and wherein closing said humidifier.lid.pushes the water eontainer-tank.onto.org said gas passage inlet seal causing sealing contact between said gas.passage.inlet.org seal and said rear face in a locus surrounding said gas. passage.inlet.org said gas.passage.inlet.org said <a href="mailto:gas.passage.inlet.org said gas.passage.inlet.org said <a href="mailto:gas.passage.inlet.org said <a h
- 178. (Withdrawn and Currently Amended) In a humidifier assembly for a flow generator used in delivery of a supply of breathable gas to a patient for treatment of sleep disordered breathing, the humidifier assembly comprising a water [[tub]]tank having an inlet and a water tank lid including an outlet, a base having a blower outlet and a water-[[tub]]tank-receiving-portion, and a hinged lid with an engagable locking mechanism,

a method of forming a <u>first</u> seal between the water [[tub]]<u>tank</u> inlet and the blower outlet of the base <u>and forming a second seal between the outlet of the water tank lid and the hinged lid, the method comprising:</u>

- (i) placing the water [[tub]]tank at least partly in the [[tub]]tank-receiving-portion of the base so as to position the water tank inlet and the blower outlet adjacent one another;
- (ii) closing the hinged lid to establish sealing contact between the hinged lid and a surface surrounding the outlet of the water tank lid; and
 - (iii) engaging the locking mechanism.
- 179. (Withdrawn and Currently Amended) The method of claim 178 wherein the blower outlet includes front-facing seal forming surface, and wherein the placing includes placing the water tank inlet and the front-facing seal forming surface adjacent one another.
- 180. (Withdrawn_and Currently Amended) The method of claim 179 whereby placing the water [[tub]]tank in the water-[[tub]]tank-receiving portion of the base further includes placing the water [[tub]]tank against the seal forming surface of the blower outlet.
- 181. (Withdrawn and Currently Amended) The method of claim 178, wherein the hinged lid further comprises a generally cylindrical portion, and the method further comprises connecting adapted to mate with an air delivery conduit tube to the generally cylindrical portion so that the supply of breathable gas can be provided to a patient interface.

182. (Withdrawn and Currently Amended) In a humidifier assembly for a flow generator used in delivery of a supply of breathable gas to a patient for treatment of sleep disordered breathing, the humidifier assembly comprising a water [[tub]]tank including a tank lid having an air outlet, and anthe humidifier assembly including a hinged lid with an engagable locking mechanism and an air delivery portion adapted to mate with an air delivery conduit so that the supply of breathable gas can be provided to a patient interface,

a method of forming a seal between <u>a surface surrounding</u> the water tub air outlet <u>formed</u> on the tank <u>lid</u> and the air delivery portion comprising:

- (i) closing the hinged lid to establish a sealed connection between the hinged lid and the surface surrounding the air outlet of the tank lid; and
 - (ii) engaging the locking mechanism.
- 183. (Withdrawn and Currently Amended) The method of claim 182 wherein the hinged lid has an underside, and the underside includes a seal forming surface, and wherein the method includes establishing the sealed connection between the seal forming surface and the surface surrounding the air outlet of the tank lid when the hinged lid is closed.
- 184. (Withdrawn and Currently Amended) The method of claim 183 wherein the seal forming surface comprises a removably attachable gasket, and the method further comprises establishing the sealed connection between the gasket and the surface surrounding the air outlet of the tank lid when the hinged lid is closed.

185. (Withdrawn) The method of claim 184 wherein the removably attachable gasket is formed of silicone.

- used in delivery of a supply of breathable gas to a patient for treatment of sleep disordered breathing, the humidifier assembly comprising a water [[tub]]tank having a water tank lid, a water tank am air inlet and am a water tank air outlet, the water tank air outlet being formed in the water tank lid, a humidifier base having a blower outlet and a water-[[tub]]tank-receiving portion, and a humidifier lid having an air delivery portion adapted to mate with an air delivery conduit-tube so that the supply of breathable gas can be provided to a patient interface, wherein said water-[[tub]]tank-receiving portion and water [[tub]]tank have complementary formations adapted to guide drop-in-positioning of said water [[tub]]tank to align said water tank air inlet with said blower outlet, the humidifier lid being adapted to sealingly contact a surface surrounding the water tank air outlet of the water tank lid upon closing of the humidifier lid, to establish a sealed air flow path extending through the water tank lid and the humidifier lid.
- 187. (Withdrawn and Currently Amended) A humidifier according to claim 186 wherein said complementary formations further guide positioning of said water [[tub]]tank to align said air outlet with a position of said air delivery portion of said humidifier lid when said humidifier lid is closed.
- 188. (Withdrawn and Currently Amended) A humidifier for delivering humidified breathable gas to a patient, including a humidifier case having a <u>humidifier</u> lid, a water container

tank at least partially within said case and including a water tank lid, said humidifier lid being adapted to seal around an outlet aperture of the water tank lid when the humidifier lid is closed, a heater in heat transfer communication with said water containertank, a gas flow path including a gas inlet, a humidified gas outlet in said humidifier.lid and an intermediate gas flow path which contacts the gas with water vapour from said eontainerwater.tank, and a gas outlet seal operatively associated with said humidifier.lid whereby closing said humidifier.lid creates eontainertank.

- 189. (Canceled)
- 190. (Withdrawn and Currently Amended) A humidifier according to claim 189188 wherein said gas outlet seal contacts an upper surface of said water container tank lid in a locus surrounding an outlet of said gas space.
- 191. (Withdrawn and Currently Amended) A humidifier according to claim 190 wherein said humidifier lid is hinged to said case.
 - 192. (Canceled)
- 193. (Withdrawn and Currently Amended) A humidifier according to claim 192188 wherein said water container surface forming said sealed gas passage tank includes a channel in an upper surface of said water container tank.

194. (Canceled)

- 195. (Withdrawn and Currently Amended) The humidifier of claim 135, further comprising a base to receive the water tank, the outlet remaining wherein the humidifier lid remains connected with the base when the tank is removed.
- 196. (Currently Amended) The humidifier of claim 136, wherein the humidifier lid is adapted to be pivotally rotated to [[an]]the open position to allow removal and/or insertion of the water [[tub]]tank from the water [[tub]]tank receiving portion of the humidifier base.
- 197. (New and Withdrawn) The method of claim 173 further comprising removing the lid of the tank before filling the tank with water.
- 198. (New) A respiratory apparatus for treating a patient comprising a base and a tank, a flow path extending from an inlet of the base to an outlet of the base, the tank forming an intermediate part of the flow path and including a tank inlet and a tank lid having a tank outlet, the base having a rear tank seal, a top tank seal, and a humidifier lid having an inner surface on which the top tank seal is mounted, the humidifier lid being movable between an open position in which the tank is insertable into the base and a closed position, wherein the tank and the base are configured and arranged such that insertion of the tank in the base and closing of the humidifier lid seals the tank inlet and outlet against the rear tank seal and the top tank seal, respectively, and secures the tank relative to the base.

199. (New) The respiratory apparatus according to claim 198, wherein the humidifier

lid is pivotable relative to the base.

200. (New) The respiratory apparatus according to claim 199, further comprising a

locking structure to lock the humidifier lid in its closed position.

201. (New) The respiratory apparatus according to claim 200, wherein the locking

structure is configured to provide an audible "click".

202. (New) The respiratory apparatus according to claim 201, wherein the rear tank

seal and the top tank seal are configured to allow sealing engagement between the tank and the

base without insertion or connection of a tube or connector of the tank and base relative to one

another.

203. (New) An apparatus for treatment of obstructive sleep apnea, comprising:

a continuous positive airway pressure device capable of providing a supply of air at a

pressure in the range of about 4cmH₂O to about 20cmH₂O; and

a humidifier connectable to the continuous positive airway pressure device, the

humidifier including:

a humidifier base,

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a humidifier lid hingedly connected to the humidifier base to allow the humidifier lid to close and open, the humidifier lid including an air delivery pipe constructed and arranged to mate with an air delivery tube, the humidifier lid further including a lid seal, the humidifier base further including a humidifier heater plate and a humidifier

base seal; and

a water tank having a tank base to receive water and a tank lid, the tank base including a heat conductive portion to conduct heat from the humidifier heater plate to water in the tank in use,

the apparatus further comprising a latch to releasably connect the continuous positive airway pressure device to the humidifier; and a locking mechanism constructed and arranged to releasably hold the humidifier lid when closed,

wherein the humidifier base is constructed and arranged to receive the water tank when the humidifier lid is open;

wherein, when the humidifier base receives the water tank, the heat conductive portion of the water tank is positioned relative to the humidifier heater plate to allow heat transfer communication therebetween in use;

wherein, when the continuous positive airway pressure device and the humidifier are latched together and the humidifier lid is closed with the water tank placed in the humidifier base, a sealed gas flow path is established, said sealed gas flow path extending from the continuous positive airway pressure device, through a humidifier base seal located between the humidifier base and a rear surface of the water tank, through an interior of the water tank, through the lid seal surrounding an outlet of the tank lid and located on an underside of the humidifier lid, and to the air delivery pipe of the humidifier lid; and

wherein an engagement face of the continuous positive airway pressure device includes electrical connectors to deliver power to the humidifier heater plate.

- 204. (New) The apparatus of claim 203, further comprising a backflow prevention structure located adjacent a mouth of the inlet aperture.
- 205. (New) The apparatus of claim 204, wherein the backflow prevention structure comprises a non-return valve.
- 206. (New) The apparatus of claim 203, wherein the humidifier includes a pair of flanges for engagement with mating recesses on the continuous positive airway pressure device.
- 207. (New) The apparatus of claim 203, wherein the continuous positive airway pressure device is constructed and arranged to detect automatically the presence of the humidifier and adjust an automatic control algorithm of the continuous positive airway pressure device when the continuous positive airway pressure device and the humidifier are connected.
- 208. (New) The apparatus of claim 203, further wherein the water tank includes filling level graduations scribed or otherwise marked on the wall of the water tank.
- 209. (New) The apparatus of claim 203, wherein the humidifier base and the water tank have complementary configurations to guide positioning of the water tank in the humidifier base.
- 210. (New) A compact apparatus for the treatment of obstructive sleep apnea, comprising:

a continuous positive airway pressure device; an air delivery tube; and a humidifier including:

a humidifier base,

a humidifier lid.

a humidifier tank and a humidifier tank lid, and

a humidifier heater plate;

wherein the continuous positive airway pressure device and the humidifier are releasably connectable by a latch;

wherein the humidifier lid includes an air delivery portion adapted to mate with the air delivery tube; wherein the humidifier lid and the humidifier base are connected by a hinge adapted to allow the humidifier lid to rotate between a closed position and an open position;

wherein the humidifier lid includes a locking mechanism adapted to releasably hold the humidifier lid in the closed position;

wherein the humidifier base is adapted to receive the humidifier tank when the humidifier lid is in an open position and to locate the humidifier tank in heat transfer communication with the humidifier heater plate,

wherein a gas flow path extends from the continuous positive airway pressure device, through the humidifier tank to and the air delivery tube when the humidifier lid is in the closed position;

wherein the humidifier base includes a first gas flow path extending between the continuous positive airway pressure device and an interior of the humidifier tank, and the humidifier base includes a second gas flow path extending between the interior of the humidifier tank and the air delivery tube;

wherein the humidifier base includes a tank receiving portion and the humidifier tank and the tank receiving portion have complementary configurations to guide positioning of the humidifier tank in the tank receiving portion and to align the sealing of the gas flow passage between the base and the humidifier tank;

wherein the first gas flow path includes an air inlet on the humidifier tank that is adapted to introduce gas flow into the humidifier tank;

wherein the humidifier tank may be removed or refilled without the need to remove the air delivery tube, and wherein the humidifier tank can be positioned in a sealing position on the humidifier base without requiring interconnection of a tube;

wherein the humidifier base and the humidifier lid are capable of one-handed engagement and disengagement to open and close the humidifier lid;

wherein the humidifier tank is structured for one-handed insertion at least partly into the humidifier base and one-handed removal from the humidifier base;

wherein the humidifier tank further comprises a rearwardly facing air inlet aperture constructed and arranged to align with an aperture of the humidifier when the humidifier tank is located at least partly in the tank receiving portion to receive the supply of gas at positive pressure from the continuous positive airway pressure device;

wherein the humidifier lid has an underside that includes a seal forming surface comprising a removable attached gasket to seal the gas flow passage between the humidifier tank and the air delivery tube, and the humidifier tank lid has an outlet opening that is configured to communicate with the attached gasket whereby a sealing connection is easily created when the humidifier lid is closed;

wherein the removable attached gasket comprises a curved sealing flange;

wherein the humidifier base has an aperture adapted to receive a supply of breathable gas from the continuous positive airway pressure device and rear tank seal extending about the aperture;

wherein the humidifier tank has an air inlet and an air outlet, and respective surfaces surrounding the air inlet and air outlet;

wherein the humidifier lid has the air delivery portion adapted to mate with the air delivery tube so that the supply of breathable gas can be provided to a patient interface;

wherein the rear tank seal is adapted to be in sealing relationship with the surface surrounding the air inlet of the humidifier tank when the humidifier tank abuts the seal, and the removable attached gasket is adapted to be in sealing relationship with the surface surrounding the air outlet of the humidifier tank lid when the humidifier lid is in a closed position,

- 211. (New) The apparatus of claim 210 wherein the apparatus is capable of generating from 4-20cmH₂O pressure and a gas flow rate of 120L/min.
- 212. (New) The apparatus of claim 211 wherein the continuous positive airway pressure device has a total volume of about 2 liters or less.
- 213. (New) The apparatus of claim 210 wherein the apparatus is capable of generating from 4-20cmH₂O pressure, and wherein a flow generator unit within the continuous positive airway pressure device has a total volume of about 2 liters or less.

- 214. (New) The apparatus of claim 213 wherein the apparatus is capable of delivering therapy with a total radiated noise of less than 33 dbA when operating at $10 \text{ cmH}_2\text{O}$.
- 215. (New) The apparatus of claim 210 wherein there is integration between the continuous positive airway pressure device and the humidifier upon physical engagement of the continuous positive airway pressure device and the humidifier with respect to gas flow.
- 216. (New) The apparatus of claim 210 wherein there is integration between the continuous positive airway pressure device and the humidifier upon physical engagement of the continuous positive airway pressure device and the humidifier with respect to gas flow and electrical interconnectivity.
- 217. (New) The apparatus of claim 210 wherein there is integration between the continuous positive airway pressure device and the humidifier upon physical engagement of the continuous positive airway pressure device and the humidifier with respect to gas flow, electrical interconnectivity, and data connection once the apparatus is powered up.
- 218. (New) The apparatus of claim 217 wherein there is automatic data connection between the continuous positive airway pressure device and the humidifier upon physical engagement of the continuous positive airway pressure device and the humidifier without the need for any other process interconnection once the apparatus is powered up.

219. (New) The apparatus of claim 210 wherein the humidifier is adapted to press the humidifier tank rearwards when the humidifier lid is closed.

220. (New) The apparatus of claim 210 wherein upon physical engagement the apparatus is configured to guard against flowback of water from the humidifier tank to the continuous positive airway pressure device.

221. (New) The apparatus of claim 210 wherein upon physical engagement between the continuous positive airway pressure device and the humidifier the apparatus is configured to guard against flowback of water from the humidifier tank to the continuous positive airway pressure device while at the same time improving the uptake of water vapor in the humidifier, wherein the air inlet of the tank is positioned to at least partially protect against flowback of water from the air inlet to the continuous positive airway pressure device, when the humidifier is tipped.

- 222. (New) The apparatus of claim 220 wherein the humidifier includes a non-return valve to guard against flowback of water from the humidifier tank to the continuous positive airway pressure device.
- 223. (New) The apparatus of claim 210 wherein upon physical engagement between the continuous positive airway pressure device and the humidifier the apparatus is configured to guard against the ingress of moisture to the power supply due to flowback of moisture from the humidifier.

- 224. (New) The apparatus of claim 210 wherein the humidifier heater plate has a heating surface and the humidifier tank has a heat transfer surface and these surfaces are shaped to correspond to each other so as to maintain close heat transfer communication.
- 225. (New) The apparatus of claim 210 wherein the latch to releasably connect the continuous positive airway pressure device and the humidifier is configured such that when the two are brought together by linear movement towards each other a latch activated tongue structure located on the humidifier engages a slot mechanical structure located on the continuous positive airway pressure device and snaps together the humidifier and the continuous positive airway pressure device so that the two are mechanically and lockably engaged.
 - 226. (New) A respiratory apparatus for treating a patient, comprising:
 - a flow generator including:
- a fan to generate a supply of pressurized breathable gas in the range of 4-20 cm H_2O , the fan including a motor and an impeller, the fan being provided within a fan housing having a cover and a base,

the flow generator further including an engagement face and at least one electrical connector and an air connector that protrude from the engagement face, a display and at least one key or device to set one or more parameters of the flow generator, an external case having top and bottom cases of rigid plastics material, a chassis including a cavity within the external case to house the fan, the cavity including a base, side walls extending upwards from the base, and a lid to enclose the fan, a printed circuit board provided in a space between the chassis and an

interior surface of the top case, the printed circuit board having the display mounted thereon, the external case having a rear wall including an air inlet that is in communication with an air inlet passage formed in the chassis, the inlet of the external case being provided with a filter, the fan housing including integral feet extending into recesses within an elastomer damping member;

and

a humidifier including:

a base unit designed for attachment to the flow generator, the base unit having a heater plate and an air inlet port configured to receive the air connector of the flow generator, a water tank placable in and removable from the base unit, the water tank including a tank lid including an air outlet aperture, the water tank including a heat conductive portion to conduct heat from the heater plate to heat water in the water tank in use, the water tank having an air inlet aperture leading to a passage within the water tank, a face of the base unit includes a guide that seats in a corresponding recess in the engagement face of the flow generator when the flow generator and the humidifier are brought together by linear movement towards each other, a latch including a latch retainer movable substantially vertically and resiliently urged substantially downwardly by a spring, so that a substantially downwardly extending finger of a tongue engages in a slot in the flow generator and snaps home to releasably engage the flow generator and the humidifier, an electrical connector to mate with the electrical connector of the flow generator, an elastomer airway seal provided to the base unit, to communicate the inlet port of the base unit to the air inlet aperture of the water tank, a humidifier lid hingedly attached to the base unit and movable between open and closed positions, wherein as the humidifier lid is moved to the closed position, the water tank is translated rearwards within the base unit so that a front facing surface of the airway seal abuts a generally flat rear surface of the water tank surrounding the inlet aperture of

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the tank, the humidifier lid including an exit aperture and an elastomer seal on an inside surface

of an upper or top wall of the lid, the elastomer seal having, in the closed position of the lid, a

downwardly facing surface to sealingly contact a surface of the water tank lid that surrounds the

outlet aperture of the water tank lid, the humidifier lid including an outlet pipe extending through

the exit aperture and the elastomer seal and having a bent portion extending at an acute angle

from an exterior surface of the upper or top wall, and a catch provided to the humidifier lid to

maintain the lid in the closed position, with the water tank being held securely relative to the

base unit.

227. (New) The respiratory apparatus according to claim 226, further comprising a

control to adjust the degree of humidification of the humidifier.

228. (New) The respiratory apparatus according to claim 227, further comprising at

least one muffler provided within the chassis.

229. (New) The respiratory apparatus according to claim 228, wherein the flow

generator has a volume of 2 liters or less.

230. (New) The respiratory apparatus according to claim 229, wherein the fan is

structured to generate a flow rate of 120 liters/minute.

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231. (New and Withdrawn) The method of claim 166, further comprising moving the lid of the humidifier between an open position and a closed position, whereby the sealed air path is established when the lid of the humidifier is in the closed position.

232. (New) A humidifier comprising:

a latch adapted to releasably engage with a continuous positive airway pressure device; an air inlet port adapted for sealable connection to an outlet of the continuous positive airway pressure device and being further adapted to receive a supply of air at positive pressure from said continuous positive airway pressure device;

a heater plate;

a water tank adapted to receive the supply of air at positive pressure and adapted to be in heat transfer communication with the heater plate, said water tank having a water tank lid including an outlet aperture;

a humidifier lid having a humidifier air outlet adapted for connection with an air delivery tube to deliver the supply of air at positive pressure to a mask, the humidifier lid being movable between closed and open positions to allow selective coupling and decoupling of the humidifier air outlet and the water tank lid via the outlet aperture; and

wherein said humidifier is constructed and arranged to retain the water tank in place when the humidifier lid is closed and to allow removal of the water tank when the humidifier lid is open.

233. (New) The humidifier according to claim 232, further comprising an electrical connector to mate with an electrical connector of the continuous positive airway pressure device,

wherein the latch, the air inlet port and the electrical connector are provided along a common engagement face of the humidifier that is structured to engage with an engagement face of the continuous positive airway pressure device.

- 234. (New) The humidifier according to claim 233, wherein removal of the water tank does not require removal of the air delivery tube.
- 235. (New) The humidifier according to claim 234, wherein the air delivery tube is connected to the lid in the open and closed positions in use.
- 236. (New) The humidifier according to claim 235, further comprising a base to receive the water tank, the outlet remaining with the base when the tank is removed.
 - 237. (New) A humidifier comprising
 - a water tank having a water tank lid;
 - a humidifier base having a water tank receiving portion; and
 - a humidifier lid having an outlet adapted to mate with an air delivery conduit;

wherein the humidifier lid is adapted to be in sealing relationship with an outlet of the water tank lid to allow a flow of air from the water tank to the air delivery conduit when the humidifier lid is in a closed position.

- 238. (New) The humidifier according to claim 237, wherein the humidifier lid is adapted to be pivotably rotated to an open position to allow removal and insertion of the water tank relative to the water tank receiving portion of the humidifier base.
- 239. (New) The humidifier according to claim 238, wherein the water tank includes a tank base, and the tank lid is removably attached to the tank base.
- 240. (New) The humidifier according to claim 239, wherein the tank base and the tank lid are arranged for pivotable movement relative to one another.
- 241. (New) The humidifier according to claim 237, wherein the humidifier lid is a hinged lid.
- 242. (New) The humidifier according to claim 237, wherein the humidifier lid is connected to the humidifier base by hinges.
- 243. (New) A breathable gas supply apparatus for treatment of respiratory disorders comprising:
 - a continuous positive airway pressure device; and
- a humidifier adapted for releasable connection to the continuous positive airway pressure device, the humidifier comprising:

a humidifier base having 1) an air inlet port adapted to receive a supply of breathable gas from the continuous positive airway pressure device and 2) an aperture downstream of the air inlet port;

a first seal adjacent the aperture;

a water tank having an air inlet and an air outlet, and a respective surface surrounding each of the air inlet and the air outlet, the surface surrounding the air inlet being flat;

a humidifier lid with an air delivery portion adapted to mate with an air delivery tube so that the supply of breathable gas can be provided to a patient interface; and

a second seal located on an underside of the humidifier lid,

wherein:

the first seal is adapted to be in sealing relationship with the flat surface surrounding the air inlet of the water tank when the water tank abuts the first seal; and

the second seal is adapted to be in sealing relationship with the surface surrounding the air outlet of the water tank when the humidifier lid is in a closed position.

244. (New) The breathable gas supply apparatus according to claim 243, wherein the first seal includes a relatively flat surface that seals with the flat surface surrounding the air inlet of the water tank, and the second seal includes a surface that seals with the surface surrounding the air outlet of the water tank.

245. (New) The breathable gas supply apparatus according to claim 244, wherein the second seal includes an inwardly oriented sealing flange that seals with the surface of the air outlet of the water tank.

246. (New) The breathable gas supply apparatus according to claim 245, wherein the sealing flange is provided to a distal end of the second seal, and the sealing flange includes an exterior end surface that abuts the surface of the air outlet.

247. (New) The breathable gas supply apparatus according to claim 246, wherein the second seal includes an aperture through which pressurized gas flows in use, the aperture defining a longitudinal axis generally parallel to the flow of pressurized gas through the aperture in use, the second seal and the outlet of the water tank abutting one another to form a seal in a sealing plane that is generally perpendicular to the longitudinal axis.

- 248. (New) The breathable gas supply apparatus according to claim 247, wherein the sealing plane is substantially co-planar or coincident with the surface of the outlet of the water tank.
- 249. (New) The breathable gas supply apparatus according to claim 248, wherein the second seal is positioned on an underside of the humidifier lid.
- 250. (New) The breathable gas supply apparatus according to claim 249, wherein the humidifier lid includes an outlet pipe configured for connection to an air delivery tube.
- 251. (New) The breathable gas supply apparatus according to claim 250, wherein the first seal extends about the aperture.

252. (New) A humidifier adapted to receive a supply of air at positive pressure for delivery to a patient circuit having an air delivery tube and a mask for treating a patient with positive pressure ventilation therapy, the humidifier comprising:

a humidifier base defining an air inlet port connectable with an outlet port of a therapy device, a heater plate, and a latch to allow connection with the therapy device,

a removable water tank configured to hold water for humidification, the water tank being removable from the humidifier base, the water tank having a tank base, a tank lid and a seal therebetween, the water tank having a tank inlet located on the back of the water tank and an outlet hole on the tank lid, and

a humidifier door in sealed contact with the outlet hole of the water tank via a door seal positioned between the humidifier door and the water tank lid, the humidifier door having a pair of hinges rotatably connected to the humidifier base and having an air outlet port configured for connection to the air delivery tube and for delivering moisturized air to the mask,

the door being rotatable between an open position and a closed position, the door having a release to release the door from the closed position.

253. (New) The humidifier according to claim 252, wherein the humidifier base includes a guide that seats in a corresponding recess in the therapy device when the therapy device and the humidifier are brought together by linear movement towards each other.

- 254. (New) The humidifier according to claim 253, further comprising one or more filling level graduations scribed or otherwise marked on the water tank to indicate correct filling height.
- 255. (New) The humidifier according to claim 254, wherein the door is rotatable from the closed position to a maximum extent of normal travel in the open position, and wherein, upon further rotation of the door beyond the maximum extent, the door becomes removed from the base.
- 256. (New) The humidifier according to claim 255, wherein the tank base includes a tank pan.
- 257. (New) The humidifier according to claim 256, wherein said tank inlet is structured and positioned relative to the water tank to at least partially protect against flowback of water from the water tank to the therapy device via the tank inlet.
- 258. (New) The humidifier according to claim 257, further including a one-way valve near a mouth of the tank inlet of the water tank.
- 259. (New) The humidifier according to claim 258, wherein the air outlet port is angled at an acute angle from an upper wall of the humidifier lid.

- 260. (New) The humidifier according to claim 259, wherein the tank lid and the tank base are configured for pivotal connection at the back of the water tank.
- 261. (New) The humidifier according to claim 260, further comprising a locking mechanism to lock the door in position and configured to provide an audible "click" sound upon locking.
- 262. (New) The humidifier according to claim 261, wherein the locking mechanism is provided to cause the audible "click" in the closed position.
 - 263. (New) Apparatus for treatment of a respiratory disease comprising: a therapy device to generate pressurized gas; and the humidifier according to claim 262.
- 264. (New) A humidifier adapted to receive a supply of air at positive pressure for delivery to an air delivery tube, comprising a base with a heater plate, a water tank configured to be at least partly received in the base, and a humidifier lid in sealed communication with an outlet of the water tank and having an air delivery tube connector configured for connection to the air delivery tube.
- 265. (New) The humidifier according to claim 264, wherein the water tank includes a tank base and a water tank lid.

266. (New) The humidifier according to claim 265, wherein the water tank lid is configured for pivoting movement relative to the tank base.

267. (New) The humidifier according to claim 266, wherein the humidifier lid is hingedly connected to the base.

268. (New) The humidifier according to claim 267, wherein the water tank further includes a tank air flow path extending from an inlet of the water tank to an outlet of the water tank,

wherein the base includes a base air flow path extending (i) from an air inlet port of the base to a first seal, positioned between the inlet of the water tank and an aperture of the base downstream from the air inlet port, and (ii) from a second seal between the outlet of the water tank to the air delivery tube connector, and

wherein the tank air flow path and water tank are positioned between the first and second seals.

- 269. (New) The humidifier according to claim 268, wherein the inlet of the water tank is positioned on a rear wall of the water tank.
- 270. (New) The humidifier according to claim 269, wherein the outlet of the water tank is positioned on an upper or top wall of the water tank.

- 271. (New) The humidifier according to claim 270, wherein the first and second seal portions are pressure-assisted seals.
- 272. (New) The humidifier according to claim 270, wherein the air delivery tube connector comprises an angled air outlet pipe.
- 273. (New) The humidifier according to claim 272, wherein the air outlet pipe extends through the humidifier lid, defining a rim.
- 274. (New) The humidifier according to claim 273, wherein the second seal fits over the rim.
- 275. (New) The humidifier according to claim 274, wherein the first seal includes a connector portion and a peripheral seal to abut and seal against a flat surface radially surrounding an aperture of the inlet of the water tank.
- 276. (New) The humidifier according to claim 275, wherein the second seal includes a sealing flange to abut and sealingly engage a surface radially surrounding an aperture of the outlet of the water tank.
- 277. (New) A humidifier adapted for interconnection between a continuous positive airway pressure device and an air delivery tube for delivery of a supply of humidified breathable gas to a patient for treatment of obstructive sleep apnea, said humidifier including an air flow

path between the continuous positive airway pressure device and the air delivery tube, the humidifier having a water tank and the humidifier being constructed and arranged to allow removal of the water tank for refilling with water without disconnection of the air delivery tube, wherein the water tank is configured to be in sealing relationship with the air flow path when an inlet to the water tank abuts a first seal of the humidifier and a lid of the humidifier is pressed against an outlet of the water tank.

- 278. (New) The humidifier according to claim 277, wherein the lid of the humidifier further comprises a second seal located on an underside of the lid.
- 279. (New) The humidifier according to claim 278, wherein the lid of the humidifier is structured to pivot about a hinge between an open position and a closed position.
- 280. (New) The humidifier according to claim 279, wherein the water tank is configured to be in sealing relationship with the second seal when the lid of the humidifier is in a closed position.
 - 281. (New) A respiratory apparatus for a patient, comprising:

a base unit having a hinged lid and a base seal, the lid having an aperture, an inside lid seal provided around the aperture, and an air delivery tube connector extending from an outside surface of the lid and configured to be connected to an air delivery tube; and

a humidifier tank having a generally flat rear inlet sealing surface engaged with a generally flat sealing surface of the base seal when the lid is open and the tank is received in the base unit, the tank including a top outlet surface engaged with a surface of the lid seal and in communication with the connector via the aperture when the lid is closed, wherein the tank is sealingly positioned in the base unit without requiring tubular connection between the tank and

base unit.

282. (New) The respiratory apparatus according to claim 281, wherein the lid seal includes an aperture bounded by a side wall and a curved sealing flange extending from the side wall and towards the aperture, said curved sealing flange being adapted to seal against the top surface of the tank lid.

- 283. (New) The respiratory apparatus according to claim 282, wherein the sealing flange seals in a plane that is perpendicular to an axis of the outlet of the tank lid.
- 284. (New) The respiratory apparatus according to claim 283, wherein the sealing plane is coincident with the top surface of the tank.
- 285. (New) The respiratory apparatus according to claim 284, wherein the base and lid seals are configured as pressure-assisted seals.
- 286. (New) The respiratory apparatus according to claim 285, wherein as pressurized gas is introduced into the gas flow path in use, this pressurized gas assists the sealing flange of the lid seal or a peripheral seal of the base seal, in creating or supplementing a firm seal around the respective inlet and outlet of the tank.

287. (New) The respiratory apparatus according to claim 286, wherein the tank is structured to be secured relative to the base unit when the lid is closed, and the tank is structured to be removable for refilling by rotating the lid open without removing the air delivery tube.

288. (New) The respiratory apparatus according to claim 287, wherein the lid is configured for disconnection from the base unit when the lid is pivoted beyond a maximum extent of normal travel.

289. (New) A respiratory apparatus for a patient, comprising:

a base unit having a hinged lid, said base unit further including a first seal portion and a second seal portion; and

a humidifier tank having a generally flat inlet sealing surface engaged with a generally flat sealing surface of the first seal portion when the lid is open and the tank is received in the base unit, the tank including an outlet surface engaged with a surface of the second seal portion when the lid is closed,

wherein in use the first and second seal portions seal with the inlet and outlet of the tank in sealing planes that are generally perpendicular to a direction of flow of pressurized gas through the inlet and the outlet such that the tank is sealingly positioned in the base unit without requiring tubular interconnection between the tank and base unit.

- 290. (New) The respiratory apparatus according to claim 289, wherein the second seal includes an aperture bounded by a side wall and a curved sealing flange extending from the side wall and towards the aperture, said curved sealing flange being adapted to seal against the outlet.
- 291. (New) The respiratory apparatus according to claim 290, wherein each sealing plane is coincident with the flat surface surrounding the inlet and outlet, respectively.
- 292. (New) The respiratory apparatus according to claim 291, wherein the first and second seals are configured as pressure-assisted seals.
- 293. (New) The respiratory apparatus according to claim 292, wherein as pressurized gas is introduced into the gas flow path in use, the pressurized gas assists the first and second seals in creating or supplementing a firm seal around the respective inlet and outlet of the tank.
- 294. (New) The respiratory apparatus according to claim 293, wherein the tank is secured relative to the base unit when the lid is closed, and the tank is removed for refilling by rotating the lid open without removing the air delivery tube from the humidifier.
- 295. (New) A humidifier for a continuous positive airway pressure device, the humidifier comprising:
 - a water tank having a water tank lid, said water tank lid having a water tank outlet,
- a humidifier base having a water tank receiving portion to receive the water tank and a heater plate to heat water in the water tank;

a humidifier lid having a humidifier lid outlet adapted to mate with an air delivery tube; and

a lid seal positioned between the water tank lid and the humidifier lid, said lid seal being positioned and structured to form a seal surrounding the water tank outlet of the tank lid to establish a sealed air flow path extending from the water tank outlet of the water tank lid, and through the humidifier lid outlet,

wherein the water tank includes an air inlet aperture structured and located to at least partly protect against flowback of water from the inlet aperture of the water tank to the continuous positive airway pressure device in use, at least when the humidifier is tipped.

- 296. (New) The humidifier of claim 295, further comprising backflow prevention structure located adjacent a mouth of the inlet aperture, to at least partly protect against flowback of water from the water tank to the continuous positive airway pressure device in use.
- 297. (New) The humidifier of claim 296, wherein the backflow prevention structure comprises a non-return valve.
- 298. (New) The humidifier of claim 295, wherein the water tank lid is configured to be detachable from the water tank.
- 299. (New) The humidifier of claim 298, further comprising a seal positioned between the water tank and the water tank lid.

- 300. (New) The humidifier of claim 298, wherein the water tank and the water tank lid are configured for one-handed disengagement by squeezing at least a portion of the tank lid.
- 301. (New) The humidifier of claim 300, further comprising a connection positioned at a rear end of the water tank, wherein said water tank lid is pivotable about the connection when removing the tank lid from the tank, such that the tank lid separates from the tank at the front end.
- 302. (New) The breathable gas supply apparatus of claim 243, further comprising a control circuit for the humidifier, including a user operable control to select a desired gas humidity setting and a heater control circuit to determine a target heater temperature corresponding to the humidity setting and to control a heater to attain said temperature, wherein said user operable control includes an off setting for which said heater control circuit is adapted to select a target heater temperature less than a lowest operating temperature of said humidifier.
- 303. (New) The breathable gas supply apparatus of claim 243, further comprising a blower enclosure for said continuous positive airway pressure device, the blower enclosure including a metal container overmoulded with an acoustically damping polymer lining.
- 304. (New) The breathable gas supply apparatus of claim 243, wherein the continuous positive airway pressure device includes a top case having an air inlet and a replaceable filter and a filter cover fitted to the top case.

305. (New) The breathable gas supply apparatus of claim 304, further comprising a bottom case comprising a shell of a rigid plastics material overmoulded with an elastomer.

306. (New) The breathable gas supply apparatus of claim 243, further comprising a printed circuit board including an LCD and a support for the LCD.

307. (New) The respiratory apparatus according to claim 226, further comprising a handle assembly including a pair of attachment arms, each attachment arm having a projection received in a respective track of said case, and a handle retention member that attaches to said case to retain said handle projections against travel along said track.

308. (New) The respiratory apparatus according to claim 307, wherein said handle retention member comprises a cover plate comprising a part of an exterior of said case.

309. (New) The respiratory apparatus according to claim 307, wherein said handle retention member has retaining projections extending into said tracks to limit travel of said handle projections along said tracks.

- 310. (New) The respiratory apparatus according to claim 307, wherein said handle retention member retains said handle projections adjacent a closed end of said tracks.
- 311. (New) The apparatus of claim 210, further comprising a fan mounted within a fan housing, wherein the fan housing comprises a cover and a rigid plastic base, wherein a bottom

surface of the rigid plastic base is provided with radial stiffening ribs, and further wherein an elastomer damping member is overmoulded to the rigid plastic base to cover a bottom surface of the rigid plastic base between the radial stiffening ribs, and further wherein a plurality of feet are

arranged to extend proud of the elastomer damping member and to receive respective helical

moulded integrally with the rigid plastic base, and further wherein said feet are constructed and

mounting springs for mounting the fan on a base of a fan cavity.